

### **REMARKS**

Favorable reconsideration, reexamination, and allowance of the present patent application are respectfully requested in view of the foregoing amendments and the following remarks. No new matter has been added by these amendments, as they are fully supported by the original specification and claims, especially page 15, lines 5-11,

#### ***Correction of Seq ID Nos.***

On page 2 of the Office Action it was noted that the claims incorrectly referred to proteins, but recited SEQ ID Nos. that depicted nucleotide sequences. The claims have been corrected accordingly.

#### ***Objection to the Disclosure***

At page 2 of the Office Action, the disclosure as a whole was objected to because it allegedly contains an embedded hyperlink and/or other form of browser-executable code. Applicant respectfully requests reconsideration of this objection.

The specification has been amended to eliminate the embedded hyperlink.

For at least the foregoing reasons, Applicant respectfully submits that the disclosure as a whole is not objectionable, and therefore respectfully requests withdrawal of the objection thereto.

#### ***Rejection under 35 U.S.C. § 101***

In the Office Action, beginning at page 3, Claim 1 was rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. Applicant respectfully requests reconsideration of this rejection.

Claim 1 has been amended to recite that the bacterium is isolated, which clearly implicates the 'hand of man'.

For at least the foregoing reasons, Applicant respectfully submits that Claim 1 is directed to statutory subject matter, and therefore respectfully requests withdrawal of the rejection thereof under 35 U.S.C. § 101.

#### ***Rejection under 35 U.S.C. § 112, first paragraph***

In the Office Action, beginning at page 4, Claims 1-3 were rejected under 35 U.S.C. § 112, first paragraph, as reciting subject matters that allegedly do not comply with the enablement requirement. Applicant respectfully requests reconsideration of this rejection.

Claims 1-3 have been amended to recite the SEQ ID Nos. of the proteins whose activities are enhanced. Furthermore, the number of amino acids which can be altered relevant to the amino acid sequence of the SEQ ID Nos. has been specified as being from 1-12 in claim 1, and this limitation has been coupled with the function of the altered protein. These amendments have been made relevant to both the protein of SEQ ID NO. 4 and SEQ ID NO. 6. It is asserted that the claims are fully enabled as the alteration of up to 12 amino acids is actually a small variation – less than 5% for SEQ ID NO. 4 and only 10% for SEQ ID NO. 6. These variations are well within the skill in the art to make and/or test for their required activity of enhanced resistance to L-amino acids.

Furthermore, the methods for enhancing activities of proteins are well-known in the art and readily practicable by one of skill in the art. The specification provides examples and description of the methods, including at page 19, lines 2-25 and page 23, line 12- page 24, line 13, and in the Examples section. These methods are clearly within the routine skill of the skilled art worker, and execution thereof will clearly result in predictable results.

For at least the foregoing reasons, Applicant respectfully submits that Claims 1-3 fully comply with 35 U.S.C. § 112, first paragraph, and therefore respectfully requests withdrawal of the rejection thereof under 35 U.S.C. § 112.

***Rejection under 35 U.S.C. § 112, second paragraph***

In the Office Action, beginning at page 8, Claims 1-3 were rejected under 35 U.S.C. § 112, second paragraph, as reciting subject matters that are allegedly indefinite. Applicant respectfully requests reconsideration of this rejection.

The claims have been amended to remove the allegedly indefinite language. For at least the foregoing reasons, Applicant respectfully submits that Claims 1-3 fully comply with 35 U.S.C. § 112, second paragraph, and therefore respectfully requests withdrawal of the rejection thereof under 35 U.S.C. § 112.

***Rejection under 35 U.S.C. § 102(b)***

In the Office Action, beginning at page 9, Claims 1-2 were rejected under 35 U.S.C. § 102(b), as reciting subject matters that allegedly are anticipated by U.S. Patent No. 4,996,147. Applicant respectfully requests reconsideration of this rejection.

Furukawa et al. clearly fails to teach either the presence of the protein of SEQ ID NO. 4 or SEQ ID NO. 6, let alone the enhanced activity of either of these proteins, or the enhanced activity of both proteins, as required by the claims. Furthermore, Furukawa et al. fail to show that the combined enhanced activity of these proteins will result in enhanced L-amino acid production. Therefore, the Office Action fails to show each and every limitation of the claims is present in the single prior art reference, and furthermore, the Office Action fails to provide any evidence of the inherency of these limitations.

For at least the foregoing reasons, Applicant respectfully submits that the subject matters of Claims 1-2 are not anticipated by the '147 patent, are therefore not unpatentable under 35 U.S.C. § 102, and therefore respectfully requests withdrawal of the rejection thereof under 35 U.S.C. § 102.

In the Office Action, beginning at page 10, Claims 1-3 were rejected under 35 U.S.C. § 102(b), as reciting subject matters that allegedly are anticipated by EP Patent Publication 0 643 135 A1. Applicant respectfully requests reconsideration of this rejection.

Similar to Furukawa et al., Sano also clearly fails to teach either the presence of the protein of SEQ ID NO. 4 or SEQ ID NO. 6, let alone the enhanced activity of either of these proteins, or the enhanced activity of both proteins, as required by the claims. Furthermore, Sano fail to show that the combined enhanced activity of these proteins will result in enhanced L-amino acid production. Therefore, the Office Action fails to show each and every limitation of the claims is present in the single prior art reference, and furthermore, the Office Action fails to provide any evidence of the inherency of these limitations.

For at least the foregoing reasons, Applicant respectfully submits that the subject

matters of Claims 1-3 are not anticipated by the EP'135 publication, are therefore not unpatentable under 35 U.S.C. § 102, and therefore respectfully requests withdrawal of the rejection thereof under 35 U.S.C. § 102.


***Conclusion***

For at least the foregoing reasons, Applicant respectfully submits that the present patent application is in condition for allowance. An early indication of the allowability of the present patent application is therefore respectfully solicited.

If Examiner Gangle believes that a telephone conference with the undersigned would expedite passage of the present patent application to issue, he is invited to call on the number below.

It is not believed that extensions of time are required, beyond those that may otherwise be provided for in accompanying documents. However, if additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a), and the undersigned authorizes that any necessary fees be charged to our deposit account 50-2821.

Respectfully submitted,

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